

OIRP #4

CRF Errors Corrected by the STIC Systems Branch

CRF Processing Date: 8/14/2001  
Edited by: AE  
Verified by: AE (STIC stat)

Serial Number: 09/788,269

ENTERED

RECEIVED ARIE COPY

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☒ Other: Seq 10 - inserted amino acid nos.

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form. 3/1/95

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/788,269

DATE: 08/14/2001  
 TIME: 15:43:12

Input Set : A:\pto.amc.txt  
 Output Set: N:\CRF3\08142001\I788269.raw

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3 <110> APPLICANT: Jarvik, Jonathan W.
5 <120> TITLE OF INVENTION: Methods and Products for Peptide-Based cDNA
6   Characterization and Analysis
8 <130> FILE REFERENCE: 2087 010261
10 <140> CURRENT APPLICATION NUMBER: US 09/788,269
11 <141> CURRENT FILING DATE: 2001-02-16
13 <150> PRIOR APPLICATION NUMBER: US 60/182,983
14 <151> PRIOR FILING DATE: 2000-02-16
16 <160> NUMBER OF SEQ ID NOS: 17
18 <170> SOFTWARE: Microsoft Word 97 SR-2
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 6
22 <212> TYPE: PRT
23 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Example of sequence made up entirely of six-codon amino acids
28 <400> SEQUENCE: 1
29 Leu Arg Arg Leu Leu Arg
30   1           5
32 <210> SEQ ID NO: 2
33 <211> LENGTH: 6
34 <212> TYPE: PRT
35 <213> ORGANISM: Artificial Sequence
37 <220> FEATURE:
38 <223> OTHER INFORMATION: Example of sequence made up entirely of one-codon amino acids
40 <400> SEQUENCE: 2
41 Met Trp Trp Met Met Trp
42   1           5
44 <210> SEQ ID NO: 3
45 <211> LENGTH: 100
46 <212> TYPE: DNA
47 <213> ORGANISM: Homo sapiens
49 <400> SEQUENCE: 3
50 gaattctttac acctcatact ttcccaagcc ccaactttct catctgaaaa tggtaatatg 60
52 atcatcctta catgtttaag gtcatgaatt gctatgtgta 100
54 <210> SEQ ID NO: 4
55 <211> LENGTH: 16
56 <212> TYPE: PRT
57 <213> ORGANISM: Homo sapiens
59 <400> SEQUENCE: 4
60 Thr Met Ile Thr Pro Ser Leu His Ala Cys Arg Ser Thr Leu Glu Asp
61   1           5           10           15
63 <210> SEQ ID NO: 5
64 <211> LENGTH: 100
65 <212> TYPE: DNA
66 <213> ORGANISM: Homo sapiens
68 <400> SEQUENCE: 5

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## RAW SEQUENCE LISTING

DATE: 08/14/2001

PATENT APPLICATION: US/09/788,269

TIME: 15:43:12

Input Set : A:\pto.amc.txt

Output Set: N:\CRF3\08142001\I788269.raw

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69 gaattcacat aaatcgcaaa tttttttttc cttcccagag ccatccaaaa ctctgtttgt 60
71 caaaggcctg tctgaggata ccactgaaga gacattaaag 100
73 <210> SEQ ID NO: 6
74 <211> LENGTH: 99
75 <212> TYPE: DNA
76 <213> ORGANISM: Homo sapiens
78 <400> SEQUENCE: 6
79 gaattctctt gggttttgtg gtgtgctaga ctttaattacc catgaatgat tttgtcctct 60
81 tgagaaaatt tcaatagcac atctattagt gttttttat 99
83 <210> SEQ ID NO: 7
84 <211> LENGTH: 27
85 <212> TYPE: DNA
86 <213> ORGANISM: Artificial Sequence
88 <220> FEATURE:
89 <221> NAME/KEY: SITE
90 <222> LOCATION: (4)..(9)
91 <223> OTHER INFORMATION: Oligonucleotide primer containing EcoRI site
93 <400> SEQUENCE: 7
94 cccgaattca gcaggtaaaa atcaagg 27
96 <210> SEQ ID NO: 8
97 <211> LENGTH: 29
98 <212> TYPE: DNA
99 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <221> NAME/KEY: SITE
103 <222> LOCATION: (4)..(9)
104 <223> OTHER INFORMATION: Oligonucleotide primer containing EcoRI site
106 <400> SEQUENCE: 8
107 ggggaattct tactcttctc cactgctat 29
109 <210> SEQ ID NO: 9
110 <211> LENGTH: 24
111 <212> TYPE: DNA
112 <213> ORGANISM: Artificial Sequence
114 <220> FEATURE:
115 <223> OTHER INFORMATION: Nucleotide input sequence used to demonstrate computer
program
116 capabilities
118 <400> SEQUENCE: 9
119 caactagaag aggtaagaaa ctat 24
121 <210> SEQ ID NO: 10
122 <211> LENGTH: 8
123 <212> TYPE: PRT
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Computer program output of encoded peptides
129 <400> SEQUENCE: 10
130 Gln Leu Glu Glu Val Arg Asn Tyr
131 1 5
133 <210> SEQ ID NO: 11
134 <211> LENGTH: 326

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## RAW SEQUENCE LISTING

DATE: 08/14/2001

PATENT APPLICATION: US/09/788,269

TIME: 15:43:12

Input Set : A:\pto.amc.txt

Output Set: N:\CRF3\08142001\I788269.raw

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135 <212> TYPE: DNA
136 <213> ORGANISM: Homo sapiens
138 <220> FEATURE:
139 <221> NAME/KEY: exon
140 <222> LOCATION: (37).. (283)
142 <400> SEQUENCE: 11
143 gggaagccca tctccagctg tctgtttccc tttaagtcca atcaagagca acgtggatgg 60
144 gcggtacctg gtggacggcg tccctttcag ctgctgcaat cctagctcgc cacggccctg 120
145 catccagtat cagatcacca acaactcagc acactacagt tacgaccacc agacggagga 180
146 gctcaacctg tgggtgcgtg gctgcagggc tgccctgctg agctactaca gcagcctcat 240
147 gaactccatg ggtgtcgtca cgctcctcat ttggtcttc gaggtaggcc ctgggcagct 300
148 gggggtagag ggtaaggaga gcctcc 326
150 <210> SEQ ID NO: 12
151 <211> LENGTH: 36
152 <212> TYPE: DNA
153 <213> ORGANISM: Artificial sequence
155 <220> FEATURE:
156 <223> OTHER INFORMATION: Primer synthesized and used to PCR amplify rds/peripherin
exon 2
157 from an individual known to carry a wild type allele of
158 rds/peripherin.
160 <400> SEQUENCE: 12
161 ggccccgaat tctccagctg tctgtttccc tttaag 36
163 <210> SEQ ID NO: 13
164 <211> LENGTH: 37
165 <212> TYPE: DNA
166 <213> ORGANISM: Artificial sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: Primer synthesized and used to PCR amplify rds/peripherin
exon 2
170 from an individual known to carry a wild type allele of
171 rds/peripherin.
173 <400> SEQUENCE: 13
174 aatttactcg agctaccccc agctgcccag ggcctac 37
176 <210> SEQ ID NO: 14
177 <211> LENGTH: 364
178 <212> TYPE: PRT
179 <213> ORGANISM: Artificial sequence
181 <220> FEATURE:
182 <223> OTHER INFORMATION: Fusion protein
184 <400> SEQUENCE: 14
185 Met Ser Pro Ile Leu Gly Tyr Trp Lys Ile Lys Gly Leu Val Gln Pro
186 1 5 10 15
187 Thr Arg Leu Leu Leu Glu Tyr Leu Glu Glu Lys Tyr Glu Glu His Leu
188 20 25 30
189 Tyr Glu Arg Asp Glu Gly Asp Lys Trp Arg Asn Lys Lys Phe Glu Leu
190 35 40 45
191 Gly Leu Glu Phe Pro Asn Leu Pro Tyr Tyr Ile Asp Gly Asp Val Lys
192 50 55 60
193 Leu Thr Gln Ser Met Ala Ile Ile Arg Tyr Ile Ala Asp Lys His Asn
194 65 70 75 80

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/788,269

DATE: 08/14/2001

TIME: 15:43:12

Input Set : A:\pto.amc.txt

Output Set: N:\CRF3\08142001\I788269.raw

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195 Met Leu Gly Gly Cys Pro Lys Glu Arg Ala Glu Ile Ser Met Leu Glu
196      85      90      95
197 Gly Ala Val Leu Asp Ile Arg Tyr Gly Val Ser Arg Ile Ala Tyr Ser
198      100      105      110
199 Lys Asp Phe Glu Thr Leu Lys Val Asp Phe Leu Ser Lys Leu Pro Glu
200      115      120      125
201 Met Leu Lys Met Phe Glu Asp Arg Leu Cys His Lys Thr Tyr Leu Asn
202      130      135      140
203 Gly Asp His Val Thr His Pro Asp Phe Met Leu Tyr Asp Ala Leu Asp
204 145      150      155      160
205 Val Val Leu Tyr Met Asp Pro Met Cys Leu Asp Ala Phe Pro Lys Leu
206      165      170      175
207 Val Cys Phe Lys Lys Arg Ile Glu Ala Ile Pro Gln Ile Asp Lys Tyr
208      180      185      190
209 Leu Lys Ser Ser Lys Tyr Ile Ala Trp Pro Leu Gln Gly Trp Gln Ala
210      195      200      205
211 Thr Phe Gly Gly Gly Asp His Pro Pro Lys Ser Asp Leu Ile Glu Gly
212      210      215      220
213 Arg Gly Ile Gln Asp Leu Val Pro His Thr Thr Pro His His Thr Thr
214 225      230      235      240
215 Pro His His Thr Thr Pro His His Thr Thr Pro Gln Asp Leu Asn Ser
216      245      250      255
217 Pro Ala Val Cys Phe Pro Leu Ser Arg Ile Lys Ser Asn Val Asp Gly
218      260      265      270
219 Arg Tyr Leu Val Asp Gly Val Pro Phe Ser Cys Cys Asn Pro Ser Ser
220      275      280      285
221 Pro Arg Pro Cys Ile Gln Tyr Gln Ile Thr Asn Asn Ser Ala His Tyr
222      290      295      300
223 Ser Tyr Asp His Gln Thr Glu Glu Leu Asn Leu Trp Val Arg Gly Cys
224 305      310      315      320
225 Arg Ala Ala Leu Leu Ser Tyr Tyr Ser Ser Leu Met Asn Ser Met Gly
226      325      330      335
227 Val Val Thr Leu Leu Ile Trp Leu Phe Glu Val Gly Pro Gly Gln Leu
228      340      345      350
229 Gly Val Ala Arg Ser Ser Gly Arg Ile Val Thr Asp
230      355      360
232 <210> SEQ ID NO: 15
233 <211> LENGTH: 87
234 <212> TYPE: DNA
235 <213> ORGANISM: Artificial sequence
237 <220> FEATURE:
238 <221> NAME/KEY: misc_feature
239 <222> LOCATION: (35)..(37)
240 <223> OTHER INFORMATION: Upstream primer used to reamplify amplicons
241      Start codon at 35-37
243 <400> SEQUENCE: 15
244 ggatcctaatacgaactcactatagggagac caccatgcat caccatcatc accatcacca 60
245 ctctccagctgtctgtttccctttaag 87
247 <210> SEQ ID NO: 16

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## RAW SEQUENCE LISTING

DATE: 08/14/2001

PATENT APPLICATION: US/09/788,269

TIME: 15:43:12

Input Set : A:\pto.amc.txt

Output Set: N:\CRF3\08142001\I788269.raw

248 <211> LENGTH: 35  
249 <212> TYPE: DNA  
250 <213> ORGANISM: Artificial sequence  
252 <220> FEATURE:  
253 <223> OTHER INFORMATION: Downstream primer used to reamplify amplicons  
255 <400> SEQUENCE: 16  
256 cttagtcatt ataccccag ctgcccaggg cctac 35  
258 <210> SEQ ID NO: 17  
259 <211> LENGTH: 28  
260 <212> TYPE: DNA  
261 <213> ORGANISM: Artificial sequence  
263 <220> FEATURE:  
264 <223> OTHER INFORMATION: Ending of hemoglobin alpha 2 transcript  
266 <400> SEQUENCE: 17  
267 gcggcaaaaa aaaaaaaaaa aaaaaaaaaa 28

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/788,269

DATE: 08/14/2001

TIME: 15:43:13

Input Set : A:\pto.amc.txt

Output Set: N:\CRF3\08142001\I788269.raw

OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/788,269

DATE: 07/18/2001

TIME: 10:22:02

Input Set : A:\010261.txt

Output Set: N:\CRF3\07182001\I788269.raw

Does Not Comply  
Corrected Diskette Needed

3 <110> APPLICANT: Jarvik, Jonathan W.  
 5 <120> TITLE OF INVENTION: Methods and Products for Peptide-Based cDNA  
 6 Characterization and Analysis  
 8 <130> FILE REFERENCE: 2087 010261  
 10 <140> CURRENT APPLICATION NUMBER: US 09/788,269  
 11 <141> CURRENT FILING DATE: 2001-02-16  
 13 <150> PRIOR APPLICATION NUMBER: US 60/182,983  
 14 <151> PRIOR FILING DATE: 2000-02-16  
 16 <160> NUMBER OF SEQ ID NOS: 17  
 18 <170> SOFTWARE: Microsoft Word 97 SR-2  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 6  
 22 <212> TYPE: PRT  
 23 <213> ORGANISM: Artificial Sequence  
 25 <220> FEATURE:  
 26 <223> OTHER INFORMATION: Example of sequence made up entirely of six-codon amino acids  
 28 <400> SEQUENCE: 1  
 29 Leu Arg Arg Leu Leu Arg  
 30 1 5  
 32 <210> SEQ ID NO: 2  
 33 <211> LENGTH: 6  
 34 <212> TYPE: PRT  
 35 <213> ORGANISM: Artificial Sequence  
 37 <220> FEATURE:  
 38 <223> OTHER INFORMATION: Example of sequence made up entirely of one-codon amino acids  
 40 <400> SEQUENCE: 2  
 41 Met Trp Trp Met Met Trp  
 42 1 5  
 44 <210> SEQ ID NO: 3  
 45 <211> LENGTH: 100  
 46 <212> TYPE: DNA  
 47 <213> ORGANISM: Homo sapiens  
 49 <400> SEQUENCE: 3  
 50 gaattcttac acctcact ttccaagcc ccaactttct catctgaaaa tggtaatagt 60  
 52 atcatcctta catgtttaag gtcattgaatt gctatgtgta 100  
 54 <210> SEQ ID NO: 4  
 55 <211> LENGTH: 16  
 56 <212> TYPE: PRT  
 57 <213> ORGANISM: Homo sapiens  
 59 <400> SEQUENCE: 4  
 60 Thr Met Ile Thr Pro Ser Leu His Ala Cys Arg Ser Thr Leu Glu Asp  
 61 1 5 10 15  
 63 <210> SEQ ID NO: 5  
 64 <211> LENGTH: 100  
 65 <212> TYPE: DNA  
 66 <213> ORGANISM: Homo sapiens  
 68 <400> SEQUENCE: 5



## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/788,269

DATE: 07/18/2001

TIME: 10:22:02

Input Set : A:\010261.txt

Output Set: N:\CRF3\07182001\I788269.raw

```

69 gaattcacat aaatcgcaaa tttttttttt cttcccagag ccatccaaaa ctctgtttgt 60
71 caaaggcctg tctgaggata ccactgaaga gacattaaag 100
73 <210> SEQ ID NO: 6
74 <211> LENGTH: 99
75 <212> TYPE: DNA
76 <213> ORGANISM: Homo sapiens
78 <400> SEQUENCE: 6
79 gaattctctt gggttttgtg gtgtgctaga cttaattacc catgaatgat tttgtcctct 60
81 tgagaaaaatt tcaatagcac atctattagt gttttttat 99
83 <210> SEQ ID NO: 7
84 <211> LENGTH: 27
85 <212> TYPE: DNA
86 <213> ORGANISM: Artificial Sequence
88 <220> FEATURE:
89 <221> NAME/KEY: SITE
90 <222> LOCATION: (4)..(9)
91 <223> OTHER INFORMATION: Oligonucleotide primer containing EcoRI site
93 <400> SEQUENCE: 7
94 cccgaattca gcaggtaaaa atcaagg 27
96 <210> SEQ ID NO: 8
97 <211> LENGTH: 29
98 <212> TYPE: DNA
99 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <221> NAME/KEY: SITE
103 <222> LOCATION: (4)..(9)
104 <223> OTHER INFORMATION: Oligonucleotide primer containing EcoRI site
106 <400> SEQUENCE: 8
107 ggggaattct tactcttctc cactgctat 29
109 <210> SEQ ID NO: 9
110 <211> LENGTH: 24
111 <212> TYPE: DNA
112 <213> ORGANISM: Artificial Sequence
114 <220> FEATURE:
115 <223> OTHER INFORMATION: Nucleotide input sequence used to deonstrate computer
program
116 capabilities
118 <400> SEQUENCE: 9
119 caactagaag aggtaagaaa ctat 24
121 <210> SEQ ID NO: 10
122 <211> LENGTH: 8
123 <212> TYPE: PRT
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Computer program output of encoded peptides
129 <400> SEQUENCE: 10
130 Gln Leu Glu Glu Val Arg Asn Tyr
132 <210> SEQ ID NO: 11
133 <211> LENGTH: 326
134 <212> TYPE: DNA

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*number the amino acids*

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/788,269

DATE: 07/18/2001

TIME: 10:22:02

Input Set : A:\010261.txt

Output Set: N:\CRF3\07182001\I788269.raw

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135 <213> ORGANISM: Homo sapiens
137 <220> FEATURE:
138 <221> NAME/KEY: exon
139 <222> LOCATION: (37).. (283)
141 <400> SEQUENCE: 11
142 gggaagccca tctccagctg tctgtttccc tttaagtcga atcaagagca acgtggatgg 60
143 gcggtacctg gtggacggcg tccctttcag ctgctgcaat cctagctcgc cacggccctg 120
144 catccagtat cagatcacca acaactcagc aactacagt tacgaccacc agacggagga 180
145 gctcaacctg tgggtgcgtg gctgcagggc tgccctgctg agctactaca gcagcctcat 240
146 gaactccatg ggtgtcgtca cgctcctcat ttggctcttc gaggtaggcc ctgggcagct 300
147 gggggtagag ggtaaggaga gcctcc 326
149 <210> SEQ ID NO: 12
150 <211> LENGTH: 36
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Primer synthesized and used to PCR amplify rds/peripherin
exon 2
156 from an individual known to carry a wild type allele of
157 rds/peripherin.
159 <400> SEQUENCE: 12
160 ggcccggaat tctccagctg tctgtttccc tttaag 36
162 <210> SEQ ID NO: 13
163 <211> LENGTH: 37
164 <212> TYPE: DNA
165 <213> ORGANISM: Artificial sequence
167 <220> FEATURE:
168 <223> OTHER INFORMATION: Primer synthesized and used to PCR amplify rds/peripherin
exon 2
169 from an individual known to carry a wild type allele of
170 rds/peripherin.
172 <400> SEQUENCE: 13
173 aatttactcg agctaccccc agctgcccag ggcctac 37
175 <210> SEQ ID NO: 14
176 <211> LENGTH: 364
177 <212> TYPE: PRT
178 <213> ORGANISM: Artificial sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: Fusion protein
183 <400> SEQUENCE: 14
184 Met Ser Pro Ile Leu Gly Tyr Trp Lys Ile Lys Gly Leu Val Gln Pro
185 1 5 10 15
186 Thr Arg Leu Leu Leu Glu Tyr Leu Glu Glu Lys Tyr Glu Glu His Leu
187 20 25 30
188 Tyr Glu Arg Asp Glu Gly Asp Lys Trp Arg Asn Lys Lys Phe Glu Leu
189 35 40 45
190 Gly Leu Glu Phe Pro Asn Leu Pro Tyr Tyr Ile Asp Gly Asp Val Lys
191 50 55 60
192 Leu Thr Gln Ser Met Ala Ile Ile Arg Tyr Ile Ala Asp Lys His Asn
193 65 70 75 80
194 Met Leu Gly Gly Cys Pro Lys Glu Arg Ala Glu Ile Ser Met Leu Glu

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/788,269

DATE: 07/18/2001

TIME: 10:22:03

Input Set : A:\010261.txt

Output Set: N:\CRF3\07182001\I788269.raw

```

195          85          90          95
196 Gly Ala Val Leu Asp Ile Arg Tyr Gly Val Ser Arg Ile Ala Tyr Ser
197          100          105          110
198 Lys Asp Phe Glu Thr Leu Lys Val Asp Phe Leu Ser Lys Leu Pro Glu
199          115          120          125
200 Met Leu Lys Met Phe Glu Asp Arg Leu Cys His Lys Thr Tyr Leu Asn
201          130          135          140
202 Gly Asp His Val Thr His Pro Asp Phe Met Leu Tyr Asp Ala Leu Asp
203 145          150          155          160
204 Val Val Leu Tyr Met Asp Pro Met Cys Leu Asp Ala Phe Pro Lys Leu
205          165          170          175
206 Val Cys Phe Lys Lys Arg Ile Glu Ala Ile Pro Gln Ile Asp Lys Tyr
207          180          185          190
208 Leu Lys Ser Ser Lys Tyr Ile Ala Trp Pro Leu Gln Gly Trp Gln Ala
209          195          200          205
210 Thr Phe Gly Gly Gly Asp His Pro Pro Lys Ser Asp Leu Ile Glu Gly
211          210          215          220
212 Arg Gly Ile Gln Asp Leu Val Pro His Thr Thr Pro His His Thr Thr
213 225          230          235          240
214 Pro His His Thr Thr Pro His His Thr Thr Pro Gln Asp Leu Asn Ser
215          245          250          255
216 Pro Ala Val Cys Phe Pro Leu Ser Arg Ile Lys Ser Asn Val Asp Gly
217          260          265          270
218 Arg Tyr Leu Val Asp Gly Val Pro Phe Ser Cys Cys Asn Pro Ser Ser
219          275          280          285
220 Pro Arg Pro Cys Ile Gln Tyr Gln Ile Thr Asn Asn Ser Ala His Tyr
221          290          295          300
222 Ser Tyr Asp His Gln Thr Glu Glu Leu Asn Leu Trp Val Arg Gly Cys
223 305          310          315          320
224 Arg Ala Ala Leu Leu Ser Tyr Tyr Ser Ser Leu Met Asn Ser Met Gly
225          325          330          335
226 Val Val Thr Leu Leu Ile Trp Leu Phe Glu Val Gly Pro Gly Gln Leu
227          340          345          350
228 Gly Val Ala Arg Ser Ser Gly Arg Ile Val Thr Asp
229          355          360
231 <210> SEQ ID NO: 15
232 <211> LENGTH: 87
233 <212> TYPE: DNA
234 <213> ORGANISM: Artificial sequence
236 <220> FEATURE:
237 <221> NAME/KEY: misc_feature
238 <222> LOCATION: (35)..(37)
239 <223> OTHER INFORMATION: Upstream primer used to reamplify amplicons
240      Start codon at 35-37
242 <400> SEQUENCE: 15
243 ggatcctaatacgaactcactatagggagac caccatgcat caccatcatc accatcacca 60
244 ctctccagctgtctgtttccctttaag 87
246 <210> SEQ ID NO: 16
247 <211> LENGTH: 35

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/788,269

DATE: 07/18/2001

TIME: 10:22:03

Input Set : A:\010261.txt

Output Set: N:\CRF3\07182001\I788269.raw

248 <212> TYPE: DNA  
249 <213> ORGANISM: Artificial sequence  
251 <220> FEATURE:  
252 <223> OTHER INFORMATION: Downstream primer used to reamplify amplicons  
254 <400> SEQUENCE: 16  
255 cttagtcatt atacccccag ctgcccagg cctac 35  
257 <210> SEQ ID NO: 17  
258 <211> LENGTH: 28  
259 <212> TYPE: DNA  
260 <213> ORGANISM: Artificial sequence  
262 <220> FEATURE:  
263 <223> OTHER INFORMATION: Ending of hemoglobin alpha 2 transcript  
265 <400> SEQUENCE: 17  
266 gcggcaaaaa aaaaaaaaaa aaaaaaaaa 28

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/788,269

DATE: 07/18/2001

TIME: 10:22:04

Input Set : A:\010261.txt

Output Set: N:\CRF3\07182001\I788269.raw

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